

Public Meeting for Mossy Creek and Long Glade Run Total Maximum Daily Load (TMDL) Development

March 2, 2004



Why Are We Here?

- To improve and protect water quality in the Mossy Creek and Long Glade Run Watersheds
- To explain the TMDL process
- To gather information and public comment
- To encourage participation in the process

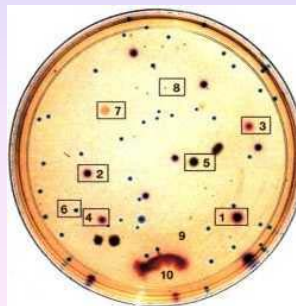


Why Mossy and Long Glade?

- DEQ routinely monitors the quality of waters across the state and reports those results every 2 years
- In this report, Mossy Creek and Long Glade Run were listed as “impaired”

Long Glade Run Impairment

- due to bacteria



Mossy Creek Impairment

- due to bacteria
- due to violation of general aquatic life (benthic) standard

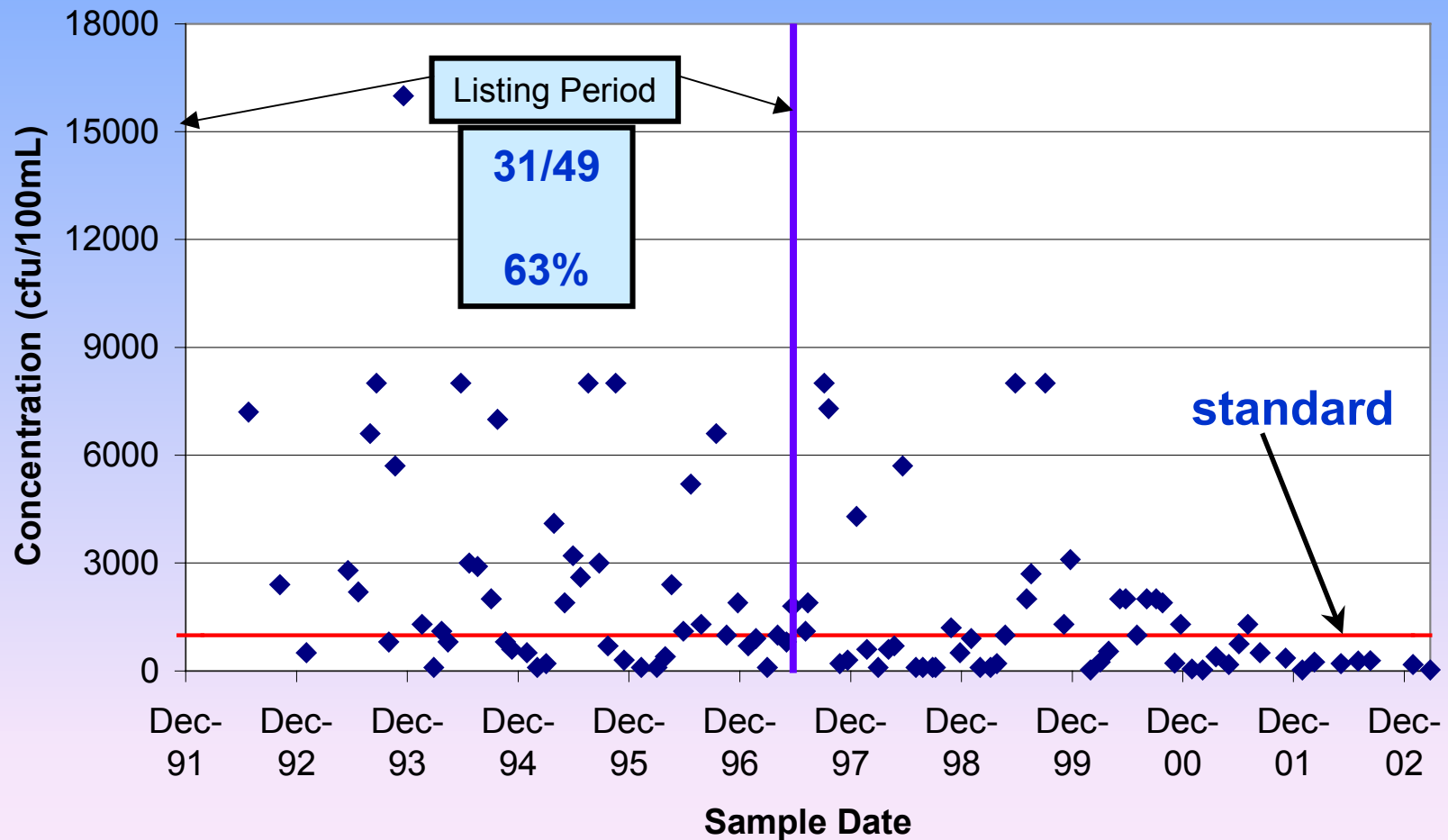
What Does “Impaired” Mean?

For Bacteria

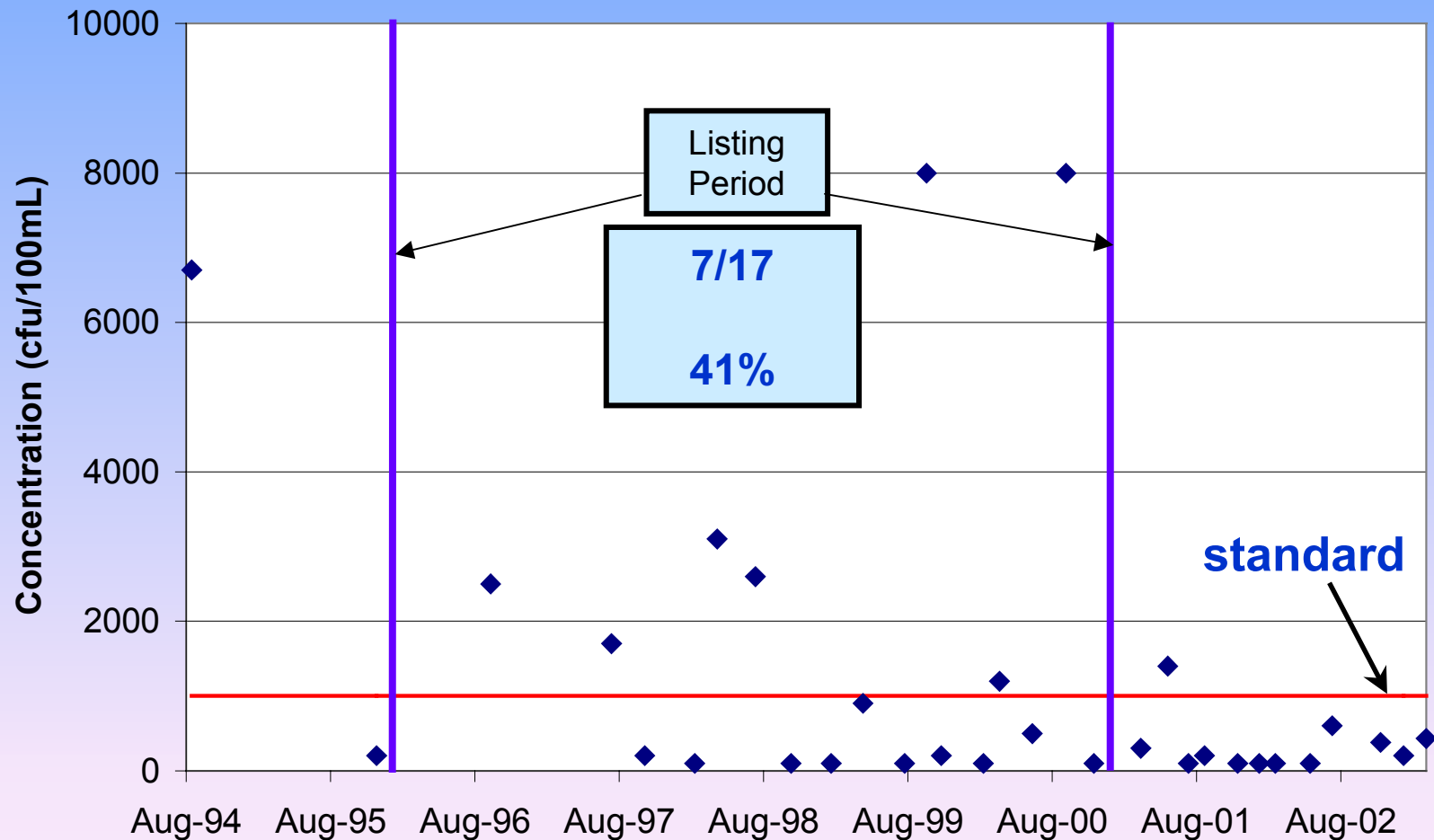
- More than 10% of samples collected exceeded State standards for bacteria
 - Bacteria standards are based on the number of fecal coliforms or *E. coli* in the water
 - Fecal coliforms and *E. coli* are indicators of human or animal waste
 - Standards are based on protecting human health during primary contact



Mossy Creek Fecal Coliform Counts



Long Glade Fecal Coliform Counts



What Does “Impaired” Mean?

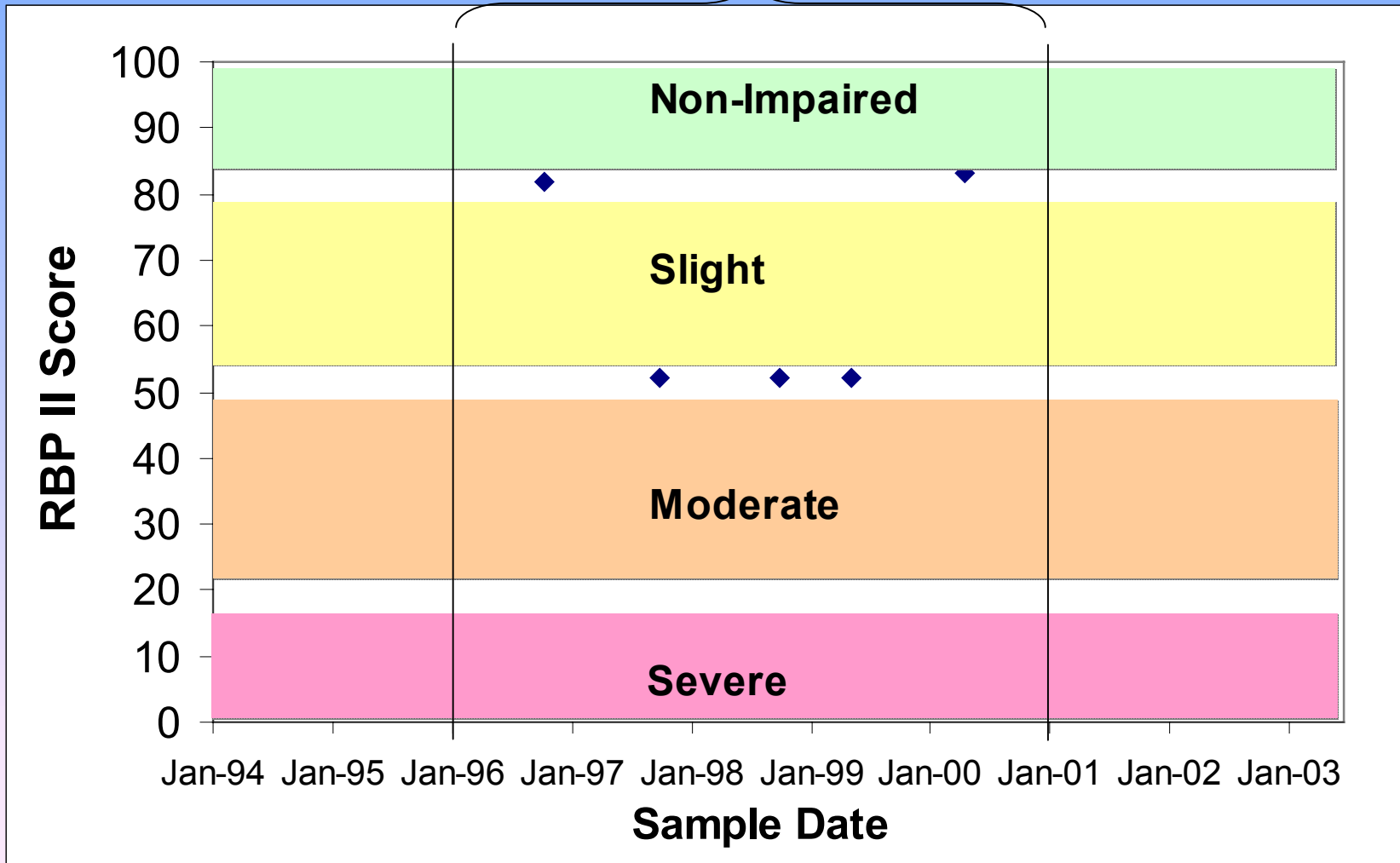
For Benthic Standard

- The regional biologist does an assessment of the stream each spring and fall
 - Benthic (bottom-dwelling) macroinvertebrates (animals without backbones) are collected and identified
 - The numbers and kinds of different benthic macroinvertebrates are compared to a healthy reference stream
 - The stream is scored based on this comparison



Mossy Creek Benthic Scores

2002 Assessment Period



Why Do We Care About the “Bugs”?

- Important food source for fish
- Important in cycling nutrients
- Good indicators of pollutants and overall stream health



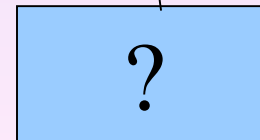
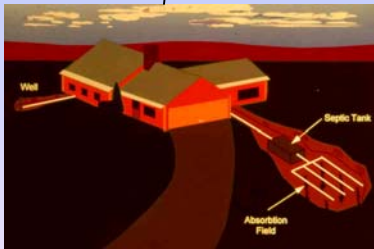
What Happens When a Stream is “Impaired”?

- DEQ is required by law to conduct a study and develop a plan to correct the impairment
 - TMDL Study
 - TMDL Implementation Plan



What is a TMDL Study?

- A TMDL Study identifies
 - all sources of pollution
 - amounts from each source
 - reductions necessary to meet water quality standards



What Does TMDL Mean?

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Technical Definition

- A TMDL describes the amount of pollution a stream can receive and still meet water quality standards

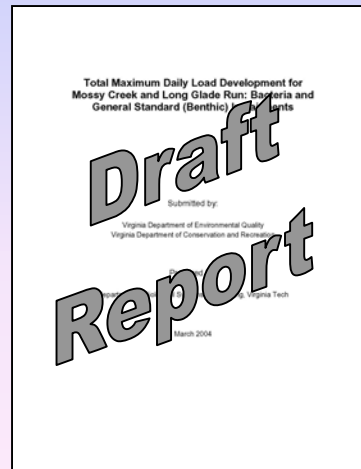
General Definition

- The TMDL is a tool to assist in correcting a water quality impairment

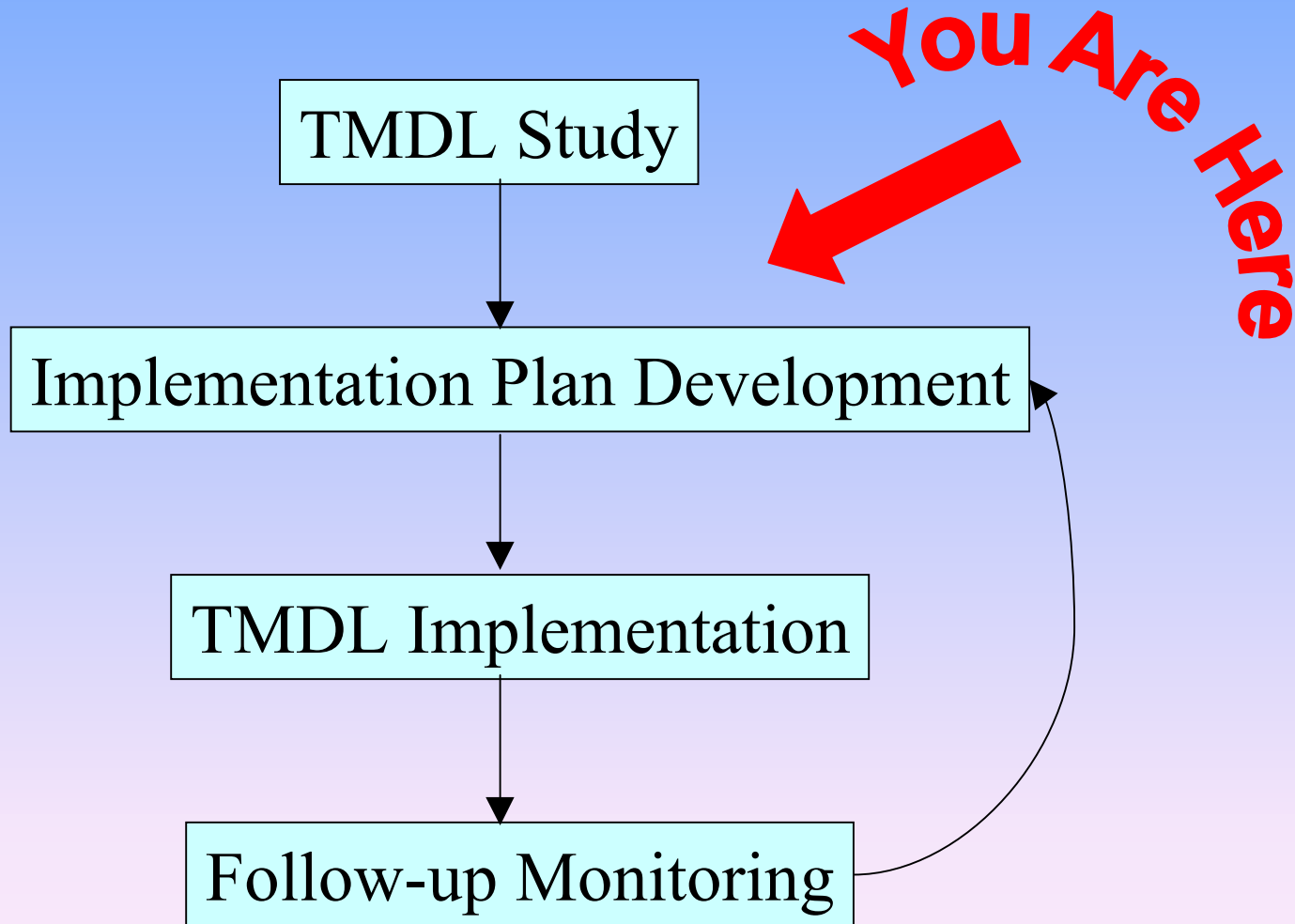


What Is the Status of the Study?

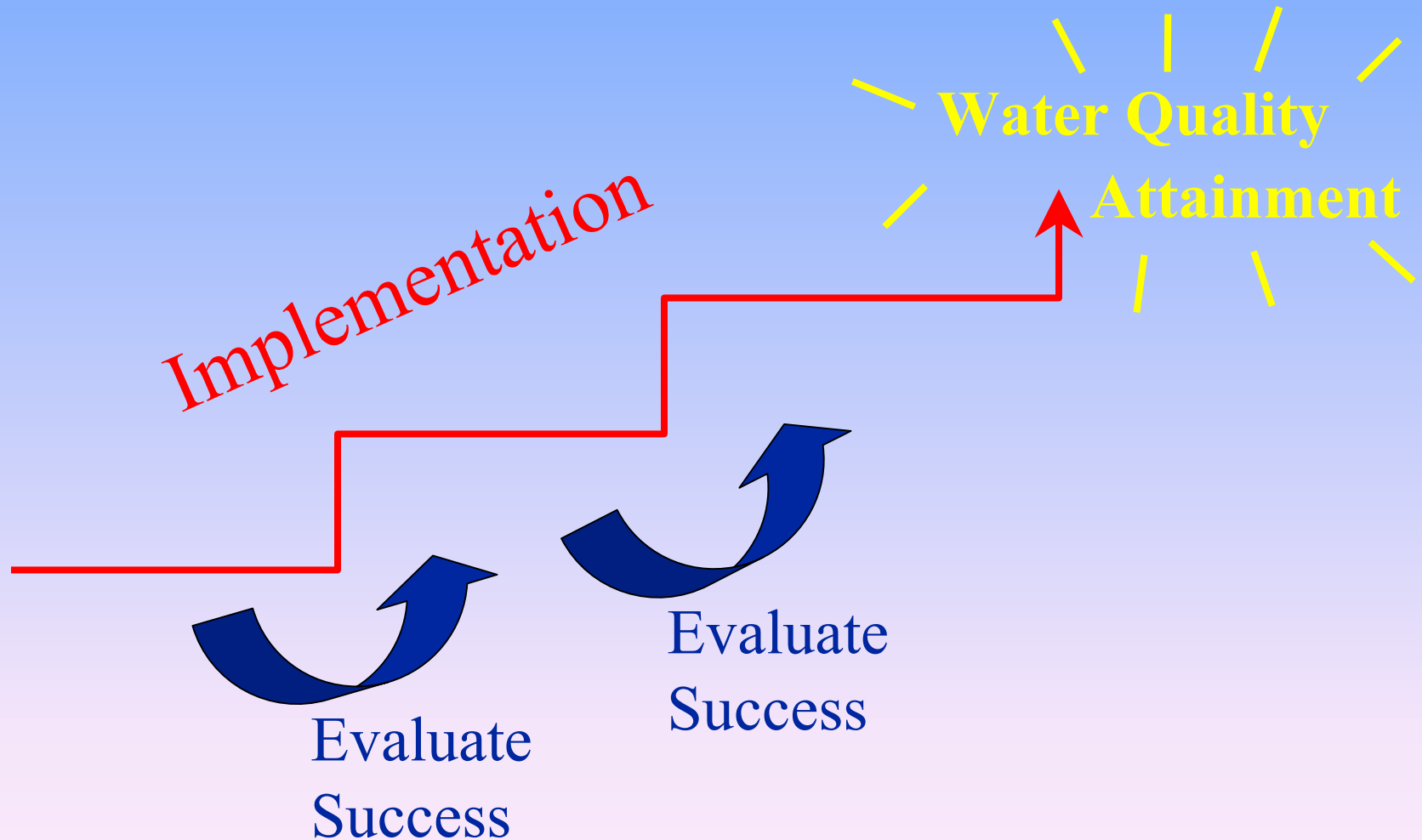
- Draft Study Report available for public review and comment
<http://www.deq.state.va.us/tmdl/tmdlrpts.html>
- Public comment period closes April 2, 2004



What's Next?



Phased Implementation



Who do I contact for more information?

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- Comment period for this public meeting ends April 2, 2004

